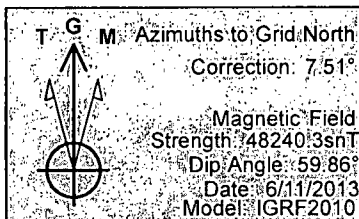


Company Name: Mewbourne Oil Co
Owl Draw 23 DM Fed Com #2H
Eddy County, New Mexico
Rig: Patterson #187
Created By: James Dawson
Date: 12/20/2013

Owl Draw 23 DM Fed Com #2H
Eddy County, New Mexico
Q130502 & WT-13922
Design #4

Mewbourne Oil Company



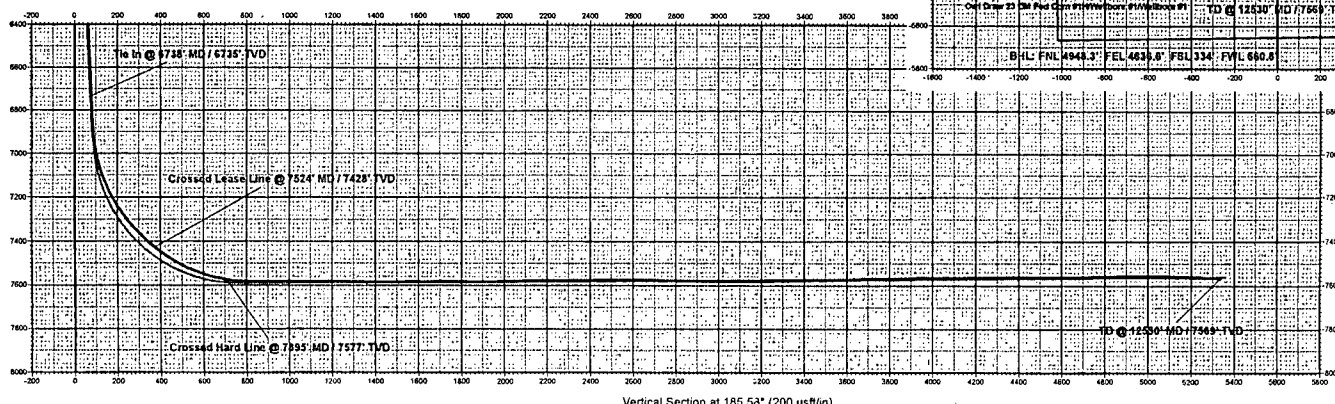
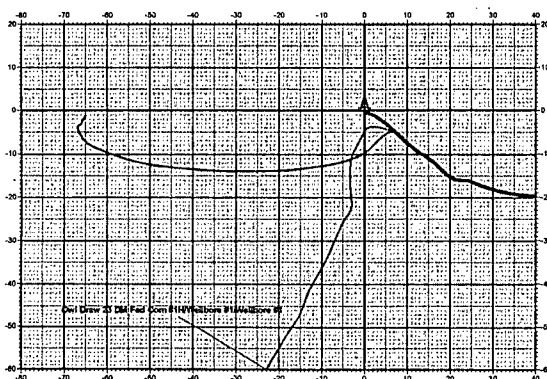
PROJECT DETAILS: Eddy County, New Mexico
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level



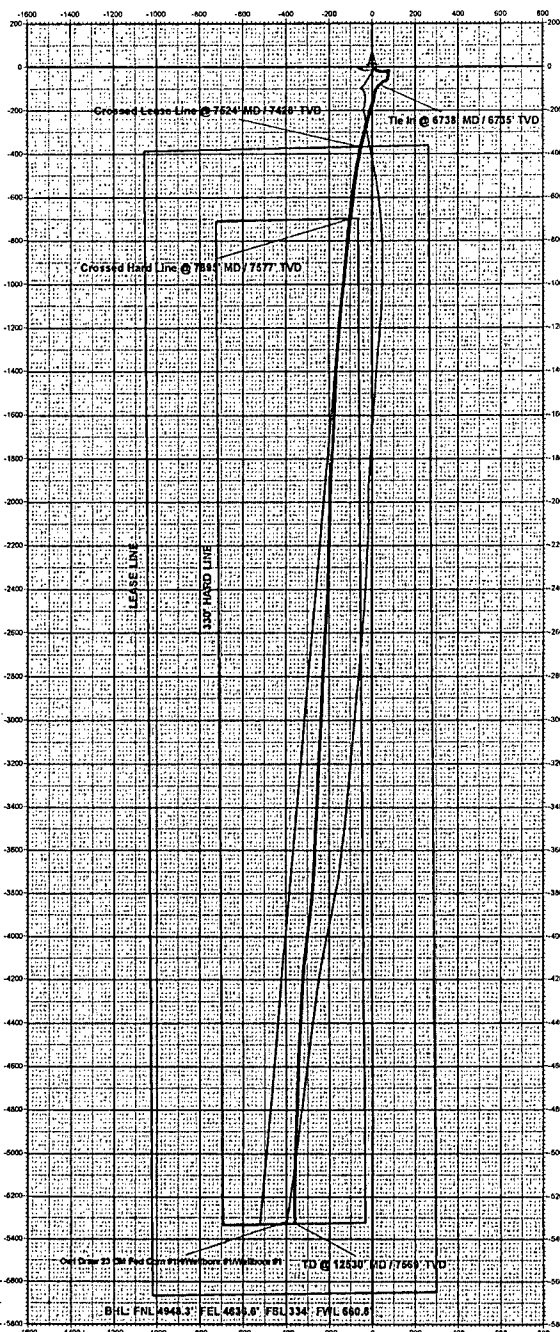
WELL DETAILS: Owl Draw 23 DM Fed Com #2H					
Ground Level: 3192.0					
+N-S	+E-W	North	East	Latitude	Longitude
0.0	0.0	37675.82	651896.60	32° 2' 8.737 N	104° 10' 55.931 W

DESIGN TARGET DETAILS						
Name	TVD	+N-S	+E-W	North	East	Latitude
PBHL Owl Draw 23 DM Fed Com #2H DF362.0	-8331.7	-420.7	371444.72	651476.30	32° 1' 15.979 N	104° 10' 2.676 W
plan hits target center						

ANNOTATIONS									
MD	Inc	Azi	TVD	+N-S	+E-W	Vsect	Departure	Annotation	
6798.0	3.77	223.80	6735.0	-81.0	33.3	77.7	170.1	Tie in @ 6738' MD / 6735' TVD	
7524.4	81.42	192.10	7427.8	-370.4	-49.9	373.4	475.5	Crossed Lease Line @ 7524' MD / 7428' TVD	
7695.3	81.23	187.10	7577.0	-701.6	-89.8	707.6	808.8	Crossed Hard Line @ 7695' MD / 7577' TVD	
12530.0	88.10	178.40	7668.5	-5326.7	-360.0	5356.7	6442.1	TD @ 12530' MD / 7668' TVD	



Vertical Section at 185.53° (200 usf/in)



Mewbourne Oil Co

Eddy County, New Mexico

Sec 14, T26S, R27E

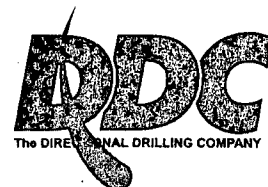
Owl Draw 23 DM Fed Com #2H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

20 December, 2013



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Owl Draw 23 DM Fed Com #2H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3172.0usft (Patterson #187)
Site:	Sec 14 T26S R27E	MD Reference:	WELL @ 3172.0usft (Patterson #187)
Well:	Owl Draw 23 DM Fed Com #2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project:	Eddy County, New Mexico		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Sec. 14 T26S R27E			
Site Position:		Northing:	376,774.54 usft	Latitude:	32° 2' 8.725 N
From:	Map	Easting:	551,931.04 usft	Longitude:	104° 9' 56.686 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.09 °

Well	Owl Draw 23 DM Fed Com #2H					
Well Position	+N/-S	0.0 usft	Northing:	376,775.82 usft	Latitude:	32° 2' 8.737 N
	+E/-W	0.0 usft	Easting:	551,996.00 usft	Longitude:	104° 9' 55.931 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,152.0 usft

Wellbore					
Wellbore #1					
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	6/11/2013	7.60	59.86	48,240

Design: Wellbore #1				
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	185.09

Survey Program		Date	12/20/2013		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	6,738.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro	
6,828.0	12,530.0	MWD (Wellbore #1)	MWD default	MWD - Standard	

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.23	174.62	100.0	-0.2	0.0	0.2	0.23	0.23	0.00
200.0	0.70	103.08	200.0	-0.5	0.6	0.5	0.66	0.47	-71.54
300.0	1.62	116.59	300.0	-1.3	2.5	1.1	0.95	0.92	13.51
400.0	1.79	131.30	399.9	-3.0	4.9	2.5	0.47	0.17	14.71
500.0	2.25	131.74	499.9	-5.3	7.6	4.6	0.46	0.46	0.44
600.0	1.66	133.30	599.8	-7.6	10.1	6.7	0.59	-0.59	1.56
700.0	1.38	121.34	699.8	-9.2	12.2	8.1	0.42	-0.28	-11.96
800.0	1.39	121.09	799.7	-10.5	14.2	9.2	0.01	0.01	-0.25
900.0	1.48	131.12	899.7	-12.0	16.2	10.5	0.27	0.09	10.03

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Owl Draw 23 DM Fed Com #2H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3172.0usft (Patterson #187)
Site:	Sec 14 T26S R27E	MD Reference:	WELL @ 3172.0usft (Patterson #187)
Well:	Owl Draw 23 DM Fed Com #2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (%/100usft)	Build Rate (%/100usft)	Turn Rate (%/100usft)
1,000.0	1.00	138.33	999.7	-13.5	17.8	11.8	0.50	-0.48	7.21
1,100.0	1.63	128.41	1,099.7	-15.0	19.5	13.2	0.67	0.63	-9.92
1,200.0	0.96	97.16	1,199.6	-16.0	21.4	14.0	0.95	-0.67	-31.25
1,300.0	0.75	86.77	1,299.6	-16.1	22.9	14.0	0.26	-0.21	-10.39
1,400.0	0.43	103.41	1,399.6	-16.1	23.9	13.9	0.36	-0.32	16.64
1,500.0	1.06	111.62	1,499.6	-16.5	25.2	14.2	0.64	0.63	8.21
1,600.0	2.35	109.54	1,599.6	-17.6	28.0	15.0	1.29	1.29	-2.08
1,700.0	2.11	104.10	1,699.5	-18.7	31.7	15.8	0.32	-0.24	-5.44
1,800.0	2.33	97.26	1,799.4	-19.4	35.5	16.2	0.34	0.22	-6.84
1,900.0	3.37	93.59	1,899.3	-19.8	40.4	16.2	1.06	1.04	-3.67
2,000.0	3.87	89.15	1,999.1	-20.0	46.7	15.7	0.57	0.50	-4.44
2,100.0	3.59	87.16	2,098.9	-19.8	53.2	15.0	0.31	-0.28	-1.99
2,200.0	3.03	80.69	2,198.7	-19.2	59.0	13.9	0.67	-0.56	-6.47
2,300.0	2.21	78.63	2,298.6	-18.4	63.5	12.7	0.83	-0.82	-2.06
2,400.0	1.79	82.24	2,398.5	-17.8	66.9	11.8	0.44	-0.42	3.61
2,500.0	1.31	90.25	2,498.5	-17.6	69.6	11.3	0.53	-0.48	8.01
2,600.0	1.24	82.38	2,598.5	-17.4	71.8	11.0	0.19	-0.07	-7.87
2,700.0	1.40	89.90	2,698.5	-17.3	74.1	10.6	0.24	0.16	7.52
2,800.0	0.80	73.01	2,798.4	-17.1	76.0	10.3	0.68	-0.60	-16.89
2,900.0	0.45	113.62	2,898.4	-17.0	77.0	10.1	0.54	-0.35	40.61
3,000.0	0.30	176.20	2,998.4	-17.5	77.4	10.5	0.41	-0.15	62.58
3,100.0	0.24	143.88	3,098.4	-17.9	77.5	10.9	0.16	-0.06	-32.32
3,200.0	0.53	174.10	3,198.4	-18.5	77.7	11.6	0.34	0.29	30.22
3,300.0	0.70	202.41	3,298.4	-19.5	77.5	12.6	0.34	-0.17	28.31
3,400.0	0.47	224.34	3,398.4	-20.4	77.0	13.5	0.32	-0.23	21.93
3,500.0	0.47	214.47	3,498.4	-21.0	76.5	14.2	0.08	0.00	-9.87
3,600.0	0.55	211.69	3,598.4	-21.8	76.0	14.9	0.08	0.08	-2.78
3,700.0	0.53	209.47	3,698.4	-22.6	75.5	15.8	0.03	-0.02	-2.22
3,800.0	1.05	200.51	3,798.4	-23.9	75.0	17.1	0.53	0.52	-8.96
3,900.0	0.46	178.83	3,898.4	-25.1	74.7	18.4	0.65	-0.59	-21.68
4,000.0	0.59	181.58	3,998.4	-26.0	74.7	19.3	0.13	0.13	2.75
4,100.0	1.03	213.83	4,098.4	-27.3	74.1	20.6	0.62	0.44	32.25
4,200.0	0.78	210.63	4,198.4	-28.6	73.3	22.0	0.25	-0.25	-3.20
4,300.0	1.02	176.58	4,298.4	-30.1	73.0	23.5	0.57	0.24	-34.05
4,400.0	1.15	181.70	4,398.3	-32.0	73.0	25.4	0.16	0.13	5.12
4,500.0	0.61	175.62	4,498.3	-33.5	73.0	26.9	0.55	-0.54	-6.08
4,600.0	0.79	173.29	4,598.3	-34.7	73.2	28.1	0.18	0.18	-2.33
4,700.0	0.83	171.42	4,698.3	-36.1	73.4	29.5	0.05	0.04	-1.87
4,800.0	1.22	184.18	4,798.3	-37.9	73.4	31.3	0.45	0.39	12.76
4,900.0	1.00	189.99	4,898.3	-39.8	73.2	33.2	0.25	-0.22	5.81
5,000.0	1.18	191.09	4,998.2	-41.7	72.8	35.1	0.18	0.18	1.10
5,100.0	0.86	210.41	5,098.2	-43.4	72.2	36.8	0.47	-0.32	19.32
5,200.0	0.93	183.52	5,198.2	-44.8	71.8	38.3	0.42	0.07	-26.89

DDC Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well Owl Draw: 23 DM Fed Com #2H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3172.0usft (Patterson #187)
Site:	Sec 14 T26S R27E	MD Reference:	WELL @ 3172.0usft (Patterson #187)
Well:	Owl Draw 23 DM Fed Com #2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1: Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,300.0	0.97	177.97	5,298.2	-46.5	71.8	39.9	0.10	0.04	-5.55	
5,400.0	1.18	179.76	5,398.2	-48.4	71.8	41.8	0.21	0.21	1.79	
5,500.0	1.43	183.86	5,498.2	-50.6	71.7	44.1	0.27	0.25	4.10	
5,600.0	1.59	194.80	5,598.1	-53.2	71.3	46.7	0.33	0.16	10.94	
5,700.0	1.24	211.41	5,698.1	-55.5	70.4	49.0	0.54	-0.35	16.61	
5,800.0	1.87	221.51	5,798.1	-57.6	68.7	51.3	0.68	0.63	10.10	
5,900.0	2.11	231.96	5,898.0	-60.0	66.2	53.9	0.43	0.24	10.45	
6,000.0	2.00	234.01	5,997.9	-62.1	63.3	56.3	0.13	-0.11	2.05	
6,100.0	2.08	235.85	6,097.9	-64.2	60.4	58.6	0.10	0.08	1.84	
6,200.0	2.15	245.75	6,197.8	-66.0	57.2	60.6	0.37	0.07	9.90	
6,300.0	2.44	260.10	6,297.7	-67.1	53.4	62.1	0.64	0.29	14.35	
6,400.0	2.31	243.78	6,397.6	-68.4	49.5	63.7	0.69	-0.13	-16.32	
6,500.0	3.81	232.58	6,497.5	-71.3	45.0	67.0	1.61	1.50	-11.20	
6,600.0	3.31	228.92	6,597.3	-75.2	40.2	71.3	0.55	-0.50	-3.66	
6,700.0	4.07	232.14	6,697.1	-79.3	35.3	75.8	0.79	0.76	3.22	
Tie In @ 6738 MD / 6735 TVD										
6,738.0	3.77	223.80	6,735.0	-81.0	33.3	77.7	1.69	-0.79	-21.95	
6,828.0	3.70	222.10	6,824.8	-85.3	29.3	82.3	0.15	-0.08	-1.89	
6,859.0	3.80	221.60	6,855.8	-86.8	28.0	84.0	0.34	0.32	-1.61	
6,891.0	3.90	226.00	6,887.7	-88.3	26.5	85.6	0.97	0.31	13.75	
6,922.0	6.20	217.00	6,918.6	-90.4	24.7	87.9	7.82	7.42	-29.03	
6,954.0	9.10	211.20	6,950.3	-94.0	22.4	91.6	9.37	9.06	-18.13	
6,986.0	11.60	207.90	6,981.7	-99.0	19.6	96.8	8.03	7.81	-10.31	
7,017.0	14.20	203.50	7,012.0	-105.2	16.6	103.3	8.96	8.39	-14.19	
7,048.0	16.60	194.50	7,041.9	-113.0	14.0	111.3	10.90	7.74	-29.03	
7,080.0	18.80	189.30	7,072.3	-122.5	12.0	121.0	8.46	6.88	-16.25	
7,112.0	20.50	188.40	7,102.5	-133.1	10.3	131.7	5.40	5.31	-2.81	
7,143.0	22.30	188.90	7,131.3	-144.3	8.6	143.0	5.84	5.81	1.61	
7,175.0	25.10	191.90	7,160.6	-157.0	6.3	155.8	9.52	8.75	9.38	
7,207.0	28.50	195.90	7,189.2	-170.9	2.8	170.0	12.02	10.63	12.50	
7,239.0	31.80	196.30	7,216.9	-186.4	-1.7	185.8	10.33	10.31	1.25	
7,270.0	34.00	196.80	7,242.9	-202.5	-6.5	202.3	7.15	7.10	1.61	
7,302.0	37.10	195.80	7,268.9	-220.4	-11.7	220.5	9.86	9.69	-3.13	
7,334.0	39.80	194.40	7,294.0	-239.6	-16.9	240.1	8.86	8.44	-4.38	
7,365.0	41.20	194.90	7,317.6	-259.1	-21.9	260.0	4.64	4.52	1.61	
7,397.0	43.10	194.70	7,341.3	-279.8	-27.4	281.2	5.95	5.94	-0.63	
7,428.0	45.10	194.90	7,363.5	-300.7	-32.9	302.4	6.47	6.45	0.65	
7,460.0	47.00	194.70	7,385.7	-323.0	-38.8	325.1	5.95	5.94	-0.63	
7,491.0	49.10	193.00	7,406.5	-345.3	-44.3	347.9	7.91	6.77	-5.48	
7,523.0	51.30	192.10	7,426.9	-369.3	-49.7	372.3	7.21	6.88	-2.81	
Crossed Lease Line @ 7524 MD / 7428 TVD										
7,524.4	51.42	192.10	7,427.8	-370.4	-49.9	373.4	8.44	8.44	0.00	
7,555.0	54.00	192.10	7,446.4	-394.2	-55.0	397.5	8.44	8.44	0.00	
7,587.0	56.10	191.60	7,464.7	-419.9	-60.4	423.6	6.69	6.56	-1.56	

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Owl Draw 23-DM Fed Com #2H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3172.0usft (Patterson #187)
Site:	Sec 14 T26S R27E	MD Reference:	WELL @ 3172.0usft (Patterson #187)
Well:	Owl Draw 23-DM Fed Com #2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
7,618.0	58.80	190.30	7,481.4	-445.5	-65.4	449.6	9.40	8.71	-4.19	
7,650.0	60.80	189.30	7,497.5	-472.8	-70.1	477.1	6.81	6.25	-3.13	
7,681.0	63.10	188.60	7,512.0	-499.8	-74.3	504.4	7.68	7.42	-2.26	
7,713.0	65.90	187.90	7,525.8	-528.4	-78.5	533.3	8.97	8.75	-2.19	
7,744.0	68.90	187.00	7,537.7	-556.8	-82.2	561.9	10.04	9.68	-2.90	
7,776.0	71.50	186.50	7,548.6	-586.7	-85.7	592.0	8.26	8.13	-1.56	
7,808.0	73.90	186.30	7,558.1	-617.0	-89.1	622.5	7.52	7.50	-0.63	
7,839.0	76.40	187.70	7,566.0	-646.8	-92.8	652.4	9.17	8.06	4.52	
7,871.0	79.10	186.80	7,572.8	-677.8	-96.7	683.7	8.87	8.44	-2.81	
Crossed Hard Line @ 7895 MD / 7577 TVD										
7,895.3	81.23	187.10	7,577.0	-701.5	-99.6	707.6	8.84	8.75	1.25	
7,903.0	81.90	187.20	7,578.1	-709.1	-100.6	715.2	8.84	8.75	1.24	
7,934.0	83.90	185.90	7,581.9	-739.7	-104.1	746.0	7.68	6.45	-4.19	
7,965.0	86.30	186.50	7,584.6	-770.4	-107.4	776.9	7.98	7.74	1.94	
8,030.0	90.50	185.60	7,586.4	-835.0	-114.2	841.8	6.61	6.46	-1.38	
8,062.0	90.80	186.50	7,586.0	-866.8	-117.6	873.8	2.96	0.94	2.81	
8,125.0	90.10	186.60	7,585.5	-929.4	-124.8	936.8	1.12	-1.11	0.16	
8,157.0	90.60	186.30	7,585.3	-961.2	-128.4	968.8	1.82	1.56	-0.94	
8,220.0	90.00	186.10	7,585.0	-1,023.8	-135.2	1,031.8	1.00	-0.95	-0.32	
8,251.0	90.30	185.10	7,584.9	-1,054.6	-138.2	1,062.7	3.37	0.97	-3.23	
8,315.0	89.30	184.70	7,585.2	-1,118.4	-143.7	1,126.7	1.68	-1.56	-0.63	
8,378.0	90.00	185.20	7,585.5	-1,181.2	-149.1	1,189.7	1.37	1.11	0.79	
8,442.0	88.70	184.90	7,586.3	-1,244.9	-154.8	1,253.7	2.08	-2.03	-0.47	
8,505.0	89.10	184.50	7,587.5	-1,307.7	-159.9	1,316.7	0.90	0.63	-0.63	
8,568.0	89.80	184.00	7,588.1	-1,370.5	-164.6	1,379.7	1.37	1.11	-0.79	
8,632.0	89.60	182.60	7,588.4	-1,434.4	-168.3	1,443.7	2.21	-0.31	-2.19	
8,695.0	90.60	182.90	7,588.3	-1,497.3	-171.3	1,506.6	1.66	1.59	0.48	
8,758.0	90.80	182.20	7,587.5	-1,560.3	-174.1	1,569.6	1.16	0.32	-1.11	
8,821.0	91.20	182.60	7,586.4	-1,623.2	-176.7	1,632.5	0.90	0.63	0.63	
8,916.0	89.30	183.30	7,586.0	-1,718.1	-181.6	1,727.4	2.13	-2.00	0.74	
9,010.0	89.50	182.80	7,587.0	-1,811.9	-186.6	1,821.3	0.57	0.21	-0.53	
9,106.0	90.40	182.60	7,587.1	-1,907.8	-191.1	1,917.3	0.96	0.94	-0.21	
9,200.0	92.20	181.00	7,585.0	-2,001.7	-194.1	2,011.1	2.56	1.91	-1.70	
9,296.0	91.50	181.70	7,581.9	-2,097.7	-196.4	2,106.8	1.03	-0.73	0.73	
9,391.0	89.80	182.20	7,580.8	-2,192.6	-199.6	2,201.7	1.87	-1.79	0.53	
9,486.0	89.60	180.50	7,581.3	-2,287.6	-201.8	2,296.5	1.80	-0.21	-1.79	
9,581.0	91.00	181.50	7,580.8	-2,382.6	-203.5	2,391.2	1.81	1.47	1.05	
9,676.0	90.10	183.50	7,579.9	-2,477.5	-207.6	2,486.1	2.31	-0.95	2.11	
9,771.0	90.90	183.50	7,579.0	-2,572.3	-213.4	2,581.1	0.84	0.84	0.00	
9,865.0	88.60	183.80	7,579.4	-2,666.1	-219.4	2,675.0	2.47	-2.45	0.32	
9,960.0	89.00	182.90	7,581.4	-2,760.9	-225.0	2,770.0	1.04	0.42	-0.95	
10,056.0	89.40	181.70	7,582.8	-2,856.8	-228.8	2,865.8	1.32	0.42	-1.25	
10,150.0	88.90	182.80	7,584.2	-2,950.7	-232.5	2,959.7	1.29	-0.53	1.17	

DDC
Survey Report



Company:	Mawbourne Oil Co.	Local Co-ordinate Reference:	Well Owl Draw 23 DM Fed Com #2H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3172.0usft (Patterson #187)
Site:	Sec 14 T26S R27E	MD Reference:	WELL @ 3172.0usft (Patterson #187)
Well:	Owl Draw 23 DM Fed Com #2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,214.0	89.20	182.90	7,585.2	-3,014.6	-235.7	3,023.7	0.49	0.47	0.16	
10,245.0	89.50	183.60	7,585.6	-3,045.6	-237.4	3,054.6	2.46	0.97	2.26	
10,277.0	90.50	184.20	7,585.6	-3,077.5	-239.6	3,086.6	3.64	3.13	1.88	
10,309.0	90.80	183.30	7,585.2	-3,109.4	-241.7	3,118.6	2.96	0.94	-2.81	
10,340.0	90.90	182.60	7,584.8	-3,140.4	-243.3	3,149.6	2.28	0.32	-2.26	
10,404.0	90.90	182.90	7,583.8	-3,204.3	-246.4	3,213.5	0.47	0.00	0.47	
10,467.0	91.00	182.40	7,582.7	-3,267.2	-249.3	3,276.5	0.81	0.16	-0.79	
10,530.0	90.80	182.60	7,581.7	-3,330.2	-252.0	3,339.4	0.45	-0.32	0.32	
10,594.0	90.80	183.30	7,580.8	-3,394.1	-255.3	3,403.3	1.09	0.00	1.09	
10,657.0	91.10	182.90	7,579.8	-3,457.0	-258.7	3,466.3	0.79	0.48	-0.63	
10,721.0	91.40	182.60	7,578.4	-3,520.9	-261.8	3,530.2	0.66	0.47	-0.47	
10,815.0	91.90	182.40	7,575.7	-3,614.8	-265.9	3,624.1	0.57	0.53	-0.21	
10,879.0	91.20	183.80	7,573.9	-3,678.6	-269.4	3,688.0	2.44	-1.09	2.19	
10,942.0	90.00	182.90	7,573.3	-3,741.5	-273.0	3,751.0	2.38	-1.90	-1.43	
11,005.0	90.40	184.90	7,573.1	-3,804.4	-277.3	3,814.0	3.24	0.63	3.17	
11,068.0	92.50	187.30	7,571.5	-3,867.0	-284.0	3,876.9	5.06	3.33	3.81	
11,132.0	91.20	186.60	7,569.4	-3,930.5	-291.8	3,940.9	2.31	-2.03	-1.09	
11,163.0	90.80	186.50	7,568.9	-3,961.3	-295.3	3,971.8	1.33	-1.29	-0.32	
11,226.0	89.60	186.50	7,568.6	-4,023.9	-302.4	4,034.8	1.90	-1.90	0.00	
11,290.0	90.00	186.50	7,568.9	-4,087.5	-309.7	4,098.8	0.63	0.63	0.00	
11,353.0	90.50	184.70	7,568.6	-4,150.1	-315.8	4,161.8	2.97	0.79	-2.86	
11,416.0	90.80	184.00	7,567.9	-4,213.0	-320.6	4,224.8	1.21	0.48	-1.11	
11,479.0	90.90	183.60	7,566.9	-4,275.8	-324.8	4,287.8	0.65	0.16	-0.63	
11,574.0	90.00	183.80	7,566.2	-4,370.6	-330.9	4,382.7	0.97	-0.95	0.21	
11,669.0	90.00	184.00	7,566.2	-4,465.4	-337.4	4,477.7	0.21	0.00	0.21	
11,764.0	89.50	182.20	7,566.6	-4,560.3	-342.5	4,572.7	1.97	-0.53	-1.89	
11,858.0	90.90	181.50	7,566.3	-4,654.2	-345.5	4,666.5	1.67	1.49	-0.74	
11,953.0	92.20	181.70	7,563.7	-4,749.1	-348.2	4,761.3	1.38	1.37	0.21	
11,985.0	93.00	181.90	7,562.3	-4,781.1	-349.2	4,793.2	2.58	2.50	0.63	
12,048.0	90.60	182.10	7,560.3	-4,844.0	-351.4	4,856.1	3.82	-3.81	0.32	
12,143.0	90.00	181.90	7,559.8	-4,938.9	-354.7	4,950.9	0.67	-0.63	-0.21	
12,237.0	88.90	181.40	7,560.7	-5,032.9	-357.4	5,044.8	1.29	-1.17	-0.53	
12,332.0	88.80	181.40	7,562.6	-5,127.8	-359.7	5,139.5	0.11	-0.11	0.00	
12,427.0	88.20	179.90	7,565.1	-5,222.8	-360.8	5,234.2	1.70	-0.63	-1.58	
12,478.0	88.10	179.40	7,566.7	-5,273.8	-360.5	5,285.0	1.00	-0.20	-0.98	
TD @ 12530 MD 7569 TVD										
12,530.0	88.10	179.40	7,568.5	-5,325.7	-360.0	5,336.7	0.00	0.00	0.00	

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Owl Draw 23 DM Fed Com #2H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3172.0usft (Patterson #187)
Site:	Sec 14 T26S R27E	MD Reference:	WELL @ 3172.0usft (Patterson #187)
Well:	Owl Draw 23 DM Fed Com #2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,738.0	6,735.0	-81.0	33.3	Tie In @ 6738' MD / 6735' TVD
7,524.4	7,427.8	-370.4	-49.9	Crossed Lease Line @ 7524' MD / 7428' TVD
7,895.3	7,577.0	-701.5	-99.6	Crossed Hard Line @ 7895' MD / 7577' TVD
12,530.0	7,568.5	-5,325.7	-360.0	TD @ 12530' MD / 7569' TVD

Checked By: _____ Approved By: _____ Date: _____